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(54) Title: HIGH PERFORMANCE POLYURETHANE CARPET BACKINGS CONTAINING MODIFIED VEGETABLE OIL POLYOLS

(57) Abstract: Carpet backing for residential, commercial and recreational carpet which exhibits a tuftbind greater than 4.5 kg, ASTM D 1335, contains a polyurethane reaction product of a polyisocyanate; an active hydrogen containing compound; and a polyol reaction product. Typically, the polyol reaction product is a reaction product of a polyol and a vegetable oil and contains less than about 50 percent by weight of unreacted vegetable oil. The vegetable oil is preferably selected from palm oil, safflower oil, canola oil, soy oil, cottonseed oil and rapeseed oil. In a preferred embodiment, the vegetable oil is blown. Typically, the amount of unreacted vegetable oil in the polyol reaction product is less than about 34 weight percent. The hard segment of the resulting polyurethane reaction product constitutes at least 20 weight percent of the polyurethane reaction product. The carpet backing of the invention may be used as a precoat, a laminate or foam coating.

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